Amendments to the Specification:

Please add the following paragraphs after the paragraph ending at page 3, line 2 of the specification.

B1

--FIG. 4 shows a cross-section of a device with a diffusion barrier.

FIG. 5 shows a schematic cross-section of a portion of the device shown in FIG. 4.

FIG. 6 shows a schematic cross-section of a circuit structure.--

Please add the following paragraph after the chemical formulas at page 7, line 15 of the specification.

B2

--Embodiments of the present invention provide an integrated circuit comprising a self-assembled monolayer diffusion barrier. FIG. 4 shows an MOS test structure containing a self-assembled monolayer barrier layer. The MOS test structure contains the following elements: a silicon layer **1**; a silicon dioxide layer **2** on the top side of the silicon layer; an aluminum back contact **3** on the bottom side of the silicon layer; a diffusion barrier **4** comprising a self-assembled monolayer; and, copper layer **5** deposited on the diffusion barrier. FIG. 5 shows a close-up view of the silicon dioxide layer **2**, copper layer **5** and the molecules of the diffusion barrier **4** between the copper layer **5** and the silicon dioxide layer. As shown, aromatic groups **4(a)** are in direct contact with the copper layer **5**. FIG. 6 shows a cross-sectional view of a circuit comprising a self-assembled monolayer diffusion barrier. The illustrated circuit contains the following elements: a copper layer **6**; a self-assembled monolayer diffusion barrier **7** that surrounds the copper layer; and a substrate **8** that includes the copper and diffusion barriers.--